Early Journal Content on JSTOR, Free to Anyone in the World

This article is one of nearly 500,000 scholarly works digitized and made freely available to everyone in the world by JSTOR.

Known as the Early Journal Content, this set of works include research articles, news, letters, and other writings published in more than 200 of the oldest leading academic journals. The works date from the mid-seventeenth to the early twentieth centuries.

We encourage people to read and share the Early Journal Content openly and to tell others that this resource exists. People may post this content online or redistribute in any way for non-commercial purposes.

Read more about Early Journal Content at http://about.jstor.org/participate-jstor/individuals/early-journal-content.

JSTOR is a digital library of academic journals, books, and primary source objects. JSTOR helps people discover, use, and build upon a wide range of content through a powerful research and teaching platform, and preserves this content for future generations. JSTOR is part of ITHAKA, a not-for-profit organization that also includes Ithaka S+R and Portico. For more information about JSTOR, please contact support@jstor.org.

cusses in Section IV. the entry on the chart of three naval stations made by the Portuguese cartographer upon this chart,—a central one on the island of Saint Yago (Cape Verde Islands), a second near the Island of Brazil (Coast of Venezuela), and a third near the Island of Andros (Bahama Archipelago). In Section V. the reader is invited to direct his attention toward a very peculiar coast-line, drawn west of the Island of Cuba, and running from South to North, and given the correct reading of twenty-two names inscribed upon this coast, which names in the above-mentioned first sketches of America had been written in a way challenging sound interpretation, and which names now, on the original chart, come forth in full linguistic purity. Two of these names are those of two Portuguese dignitaries, and personal friends of King Joam II., with whom Columbus, a shipwrecked man, had conversed when arriving at Lisbon. Two other names are those of Cozumel and of Campeche, names known to appertain to ancient as well as to modern Yucatan. The circumstance that the three coasts of the peninsula were straightened out to one single line by the draughtsman of the chart is satisfactorily explained. In Section VII., "Identifications," the author shows that when comparing the characteristics proper to the physical features of the three coasts of Yucatan, they will be found to tally upon both the Portuguese and the modern chart, and that all of them present themselves in their natural order of succession.

Unfortunately, Dr. Valentine's article was not published all at once, but at long intervals.—A. S. GATCHET.

Schroeter's Fungi of Silesia.[1]— The third volume of Dr. Ferdinand Cohn's *Kryptogamen Flora von Schlesien* is to be devoted to the Fungi, which Dr. Schroeter is to elaborate. Of this work, begun in 1885, and issued in "Lieferungen" from time to time, Part I. is now complete. The author gives ninety pages of general description and introductory matter, in which (1) the history of fungology in Silesia, (2) the distribution of fungi in Silesia, (3) the general morphology and biology, and (4) the system of classification of the fungi, are discussed.

Bock appears to have been the first to catalogue the fungi of the region included in Schroeter's book: he enumerated twelve species in 1546. Cæsalpinus, in 1583, and Porta, in 1592, enumerated about twenty fungi, while Clusius, in 1601, brought the number up to one hundred and two species, representing some forty-seven genera. Little more was done until the time of Linnæus, when the names of Batsch, Schaeffer, and Tode appear, and still later (1801), Persoon. During the present century the investigators of the fungi have been rapidly increasing in numbers.

---

[1] *Die Pilze Schlesiens.* Bearbitet von Dr. J. Schroeter. Erste Hälfte, Breslau, 1889. J. U. Kern's Verlag (Max Müller). 814 pp., 8vo.

In discussing the distribution of fungi, Schroeter states that about 1885 *Tilletia lævis* Kuhn (= *T. foetens* [B. & C.] Trelease) was first found at Breslau, and that previous to 1870 *Puccinia sorghi* Schw. was not known to him to occur in Silesia. The present wide distribution of both these fungi makes these facts very interesting.

It is interesting also to find that, in discussing the relationships of the different groups, Schroeter regards the teleutospore of the Uredineæ as an ascus containing one or more spores, the ascus-membrane fitting tightly over the spores. His statement of his view is given below in a purposely literal translation :

"The Uredineæ stand in close relationship to the typical Ascomycetes, as is undoubtedly generally recognized from the investigations of Tulasne and De Bary. Indications of this fact are furnished by the various fruit-forms, among which are noticeable the spermogerm and stylospore layers (uredo-fruit) that appear in the Ascomycetes. The Æcidia have hitherto been regarded as the analogues of the Sporangium-fruits. I believe that this view can not be maintained, but that these analogues are plainly to be recognized in the teleutospore-fruits. In these latter is found the characteristic, definitely-fixed spore-member, which (barring occasional variations owing to the stunting of individual spores) appears as a dual (*Puccinia*, *Gymnosporangium*,) or multiple of the same (*Phragmidium*, *Coleosporium*,) unless there is but one spore developed, as is the case with *Uromyces* and *Melampsora*. In many cases (very plainly in *Puccinia asphodeli*, of the Mediterranean flora) the structure of the so-called spore-divisions is easily seen to be of the nature of endogenous spores, even in the ripe spores; it is also more or less plainly to be distinguished in *Phragmidium*, especially in the young spores. In all cases, the membrane of the spore fuses with that of the mother cell, yet in such a way that frequently it can be recognized as a separate hull."

This view is identical with that set forth by the writer hereof in 1880.[2]

Schroeter divides the fungi into three divisions or series, viz. : Myxomycetes, Schizomycetes, and Eumycetes; each of which is again subdivided into orders and families. The Myxomycetes contain three orders, viz.: Acrasiei, Myxogasters, and Phytomyxini. The treatment of the Schizomycetes is essentially identical with Cohn's, form-species and form-genera being described as species and genera. Three orders are recognized, viz.: Coccobacteria, Eubacteria, and Desmobacteria.

---

[2] Botany for High Schools and Colleges. New York. p. 315.

The orders of the Eumycetes are considered by Schroeter to have relationship indicated by the following disposition:

1. Chytridiei.
2. Zygomycetes.
    Sub-ord. Mucorini.
    Sub-ord. Entomophthorei.
3. Oomycetes.
4. Ascomycetes.
5. Uredineæ.
6. Auriculariei.
7. Basidiomycetes.

In the treatment of these orders, in the body of the book, the Protomycetes and the Ustilagineæ are inserted after the Oomycetes, and the Ascomycetes and imperfect fungi are placed after the Basidiomycetes. The Peronosporacei are divided into seven genera, viz.: Pythium, Cystopus, Phytophthora, Sclerospora (including but one species, the *Peronospora graminicola* of Saccardo), Plasmopora (including *Peronospora nivea* Unger, *P. obducens* Schr., and others), Bremia (including *Peronospora gangliformis* of De Bary), and Peronospora, the latter still containing no less than 44 species, although considerably reduced, as indicated above.

The Agaricacei are referred to many genera, the usual sub-genera of Agaricus being raised to generic rank. This gives us the name *Psalliota campestris* (Linn.) Schröt. for the common mushroom hitherto known as *Agaricus campestris*. The genus Agaricus, as thus indicated, contains 171 Silesian species.

In glancing over the pages we notice that the familiar *Schizophyllum commune* of Fries must give way to *S. alneum* (Linn.) Schröt.

So, too, our well-known *Lycoperdon giganteum* (the giant puff-ball) is to be known hereafter as *Globaria bovista* (Linn.) Schröt.

A most useful host-index is included in the volume, which is provided with full generic and specific indexes. The next volume will include the Ascomycetes and "Imperfect fungi."—CHARLES E. BESSEY.